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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,399

09/18/2003

Michael S. Leung

P0298US-7

8955

7590

02/28/2006

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EXAMINER

LE, THAO X

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

# Office Action Summary

Application No.

10/666,399

Applicant(s)

LEUNG ET AL.

Examiner

Thao X. Le

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 20-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-19 and 33-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13-19, 33-34, and 36-37 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6329224 to Nguyen.

Regarding claim 13 and 33 Nguyen discloses a method for coating a plurality of semiconductor device or LEDS, comprising: providing a mold (frame 373, top layer 302 and bottom layer 386), fig. 10, with a formation cavity (space), column 12 line 53, for holding a plurality of semiconductor devices or LEDS 393, col. 12 lines 57 and 62, said formation cavity at least partially defined by upper 302, col. 12 line 51, and lower 386, column 12 line 36, mounting a plurality of semiconductor devices 393, fig. 10, within said mold formation cavity directly to at least one of said upper and lower sections, each of said semiconductor devices 393; injecting, col. 12 line 54, or otherwise introducing curable coating material or matrix material (encapsulant), column 12 lines 53, into said mold to fill said mold formation cavity and at least partially cover said semiconductor devices with coating material 40; and curing, or otherwise treating said coating material, column 12 lines 19-20, so that said semiconductor devices 393 are at least partially embedded in said cured coating material (encapsulant), fig. 10.

Regarding claims 14-15 and 34, Nguyen discloses the method further comprising removing said cured or treated coating material with said embedded semiconductor devices 393 from said formation cavity, further comprising separating said embedded semiconductor devices 393 so that each is at least partially covered by a layer of said cured or treated coating material, fig. 12.

Regarding claims 16 and 36, Nguyen discloses the method wherein upper 302 and lower 386 sections provide opposing parallel surface, said semiconductor devices 393 arranged on one or both of said opposing surfaces, fig. 10.

Regarding claims 17 and 37, Nguyen discloses the method claim wherein said curing otherwise treating said semiconductor material comprises one of the methods from the group comprising heat curing, optical curing or room temperature curing, column 10 line 16.

Regarding claim 18, Nguyen discloses a method wherein the semiconductor devices 393 are separated by dicing or scribe and break, col. 14 line 11.

Regarding claim 19, Nguyen discloses the method wherein the semiconductor devices are separated such that the layer of cured or otherwise treated coating material conforms to the shape of the semiconductor device 393, fig. 12.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over US6329224 to Nguyen in view of US 6252254 to Soules et al.

Regarding claim 35, Nguyen does not disclose the method wherein the matrix material contains light conversion particles.

However, Soules discloses the method wherein the LED, fig. 2, comprises a matrix material 15 contains light conversion particles, column 6 lines 15-25. At the time the invention was made; it would have been obvious to one of ordinary skill in the art to use the encapsulating material contains light conversion particles teaching of Soules with Nguyen's capsulation material, because it would have created a specific LED characteristics such as color and color rendering index, as taught by Soules, column 2 line 27-32.

***Response to Arguments***

6. Applicant's arguments with respect to claims 13-19 and 33-37 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

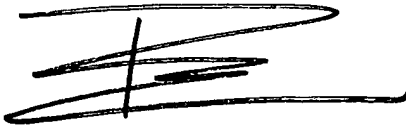
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao X. Le whose telephone number is (571) 272-1708. The examiner can normally be reached on M-F from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on (571) 272 -1705. The fax phone

Art Unit: 2814

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of several horizontal strokes and a vertical line, appearing to read 'Thao X. Le'.

Thao X. Le  
21 Feb. 2006